Feeding Rate Experiment

Brine Shrimp Kinetics Study

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1. Remove ~100 adult, age-matched artemia from main culture tank and rinse in fresh media in a 200-ml beaker. (Artemia from the same hatch date and culture tank are very similar in size.)
2. Add 30 mls of fresh 100 g/L and 160 g/L GSL media to 50 ml centrifuge tubes.
3. Carefully transfer 15 artemia to each tube with a plastic transfer pipette, minimizing the amount of liquid transferred with each artemia.
4. Gently aerate the tube with capillary tubing to ensure even mixing and full air saturation and allow artemia a minimum of 10 min to recover from handling.
5. Add 2 mls of *Dunaliella viridis* concentrate to each tube (save sample of algae to perform cell counts for algae density).
6. Immediately take an initial water sample of 1 ml, and then take 1 ml sample every 10 minutes up to 60 minutes.
7. After thorough mixing to avoid problems with settling, measure the absorbance of all water samples on a spectrophotometer at 750 nm.
8. Plot absorbance over time and perform a linear regression on the decrease in absorbance to obtain the slope (change in absorbance per minute).
9. Divide slope by number of individuals per tube and express feeding rate as change in absorbance/ minute/ individual.